

[28th February 1928]

| District.        | Repair of tanks (Board's Standing Order No. 8)—cont. |          |        |                                 |  | Digging of channels (Board's Standing Order No. 10).     |                           |        |   |          |        |                                 |  |
|------------------|--|----------|--------|---------------------------------|--|--|---------------------------|--------|---|----------|--------|---------------------------------|--|
|                  | Number of applications disposed of during the year.  |          |        | Balance at the end of the year. | Remarks—Number of works completed during the year. | Number of applications.                                  |                           |        | Number of applications disposed of during the year. |          |        | Balance at the end of the year. | Remarks—Number of works completed during the year. |
|                  | Granted.   | Refused. | Total. |                                 |  | Remaining undisposed of at the commencement of the year. | Received during the year. | Total. | Granted.  | Refused. | Total. |                                 |  |
|                  | (13)   | (14)     | (15)   | (16)                            | (17)   | (18)   | (19)                      | (20)   | (21)  | (22)     | (23)   | (24)                            | (25)   |
| Ganjam ..        | ..   | ..       | ..     | ..                              | ..   | ..   | 1                         | 1      | 1   | ..       | 1      | ..                              | ..   |
| Vizagapatam ..   | ..   | 4        | 4      | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| East Godavari .. | ..   | ..       | ..     | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| West Godavari .. | 1  | ..       | 1      | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Kistna ..        | 1  | ..       | 1      | ..                              | 1  | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Guntur ..        | ..   | 1        | 1      | 1                               | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Nellore ..       | 2  | ..       | 2      | 2                               | ..   | 1  | ..                        | 1      | ..  | 1        | 1      | ..                              | ..   |
| Cuddapah ..      | ..   | 5        | 5      | 3                               | ..   | 1  | 1                         | 2      | 2   | ..       | 2      | ..                              | ..   |
| Anantapur ..     | 13   | 6        | 19     | 8                               | ..   | 4  | 3                         | 7      | ..  | 4        | 4      | 3                               | ..   |
| Bellary ..       | ..   | ..       | ..     | ..                              | ..   | 1  | ..                        | 1      | 1   | ..       | 1      | ..                              | ..   |
| North Arcot ..   | ..   | 1        | 1      | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Chittoor ..      | ..   | 3        | 3      | 5                               | ..   | 1  | 1                         | 2      | 1   | 1        | 2      | ..                              | ..   |
| South Arcot ..   | ..   | ..       | ..     | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Trichinopoly ..  | ..   | ..       | ..     | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Madura ..        | ..   | ..       | ..     | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Coimbatore ..    | ..   | ..       | ..     | 1                               | ..   | 13   | 30                        | 43     | 7   | 25       | 32     | 11                              | ..   |
| Salem ..         | ..   | ..       | ..     | 1                               | ..   | 8  | 7                         | 15     | 4   | 10       | 14     | 1                               | ..   |
| Tinnevely ..     | ..   | ..       | ..     | ..                              | ..   | ..   | ..                        | ..     | ..  | ..       | ..     | ..                              | ..   |
| Total ..         | 17   | 20       | 37     | 21                              | 1  | 29   | 43                        | 72     | 16  | 41       | 67     | 15                              | ..   |

## APPENDIX III.

[Vide answer to question No. 1617 asked by Syed Tajudin Sahib Bahadur at the meeting of the Legislative Council held on the 28th February 1928, page 108 supra.]

*Note on Lift Irrigation by Electric Pumping.*

Mr. Hawkins, the late Chief Engineer for Irrigation, set on foot an enquiry in August 1925 as to the possibilities of well irrigation by group electric pumping in areas where supply by direct flow from rivers or tanks was deficient or non-existent. The enquiry was addressed to all the Collectors and Superintending Engineers who were asked for all available information as regards likely areas, possibilities of subsoil supply as indicated by the yield from existing wells, nature of crops already grown or likely to be

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grown, approximate cost of water lift from existing wells in the areas, and for any other suggestions. The replies received were in many cases meagre in information. Whenever they indicated possibilities they were referred for opinion and suggestions to the Directors of Agriculture and Industries.

2. Mr. Hawkins' enquiry was wide in scope and was made irrespective of whether hydro-electric power was available in any particular locality or not. So far as the Hydro-electric Department is concerned the question has application only to those districts in which there is reasonable prospect of hydro-electric power being made available, viz.—

- (a) Pykara area—comprising Nilgiris, Coimbatore, Salem, Trichinopoly, Madura and possibly Malabar and South Kanara,
- (b) Papanasam area—comprising Tinnevely and Ramnad; and
- (c) Kolab area—comprising Vizagapatam.

3. The Collectors of Nilgiris, Malabar and South Kanara say that in their areas there is no well irrigation at all. The Collector of Ramnad does not see any chance of group well irrigation in his district. Leaving these areas out, there remain Coimbatore, Trichinopoly, Salem, Madura, Tinnevely and Vizagapatam districts in which there appear prospects of such hydro-electric power irrigation. The utilization of wells for irrigation in many of these districts, especially in Coimbatore, is very prevalent and successful, and the farmers are readily persuaded to invest money for new wells or improving old wells whenever there appears reasonable chance of increased return.

4. Lift irrigation has been very successful in other parts of the world where conditions are not so very different from those prevailing in Southern India. Though there is no immediate demand for hydro-electric power for well irrigation, there is no reason whatever why a good power load should not develop after some spade work and publicity by the Department. Some of the problems that have to be met and which have been referred to by the district authorities and the Directors of Agriculture and Industries, are—

(1) The size and capacity of wells—which in many places will not bear a pump at all. The farmer will not consent to deepen or otherwise improve his well unless he is sure of success. A careful subsoil survey should hence precede any such attempt.

(2) The size of holdings—the majority of which are very small. Cattle must be kept in any case for cultivation purposes and with small holdings it pays to utilize the cattle also for baling since their time is not fully occupied on the land.

(3) The working of machinery, be it of the simplest kind, is beyond the ability of the average farmer, and a trained mechanic is now an expensive luxury.

(4) The poverty of the general mass of the people to whom the slightest addition in the way of capital expenditure may not be permissible.